

K053047

**APPENDIX A**  
**510(K) SUMMARY OF SAFETY AND EFFECTIVENESS**

K053047

### 510(k) SUMMARY

As required by Section 12 of the Medical Devices Act of 1990, Reliant technologies, Inc. is providing a summary of safety and effectiveness information available for Reliant Technologies, Inc. Laser System, as well as the substantial equivalence decision making process.

Submitter: Reliant Technologies, Inc.  
Address: 464 Ellis St.  
Mountain View, CA 94043

Contact Person: Heather Tanner  
Clinical and Regulatory Affairs  
Telephone: (650) 641-5861  
Facsimile: (650) 641-3641

Date prepared: October 27, 2005  
Device Trade Name: Fraxel SR Laser System  
Common Name: Dermatology Laser  
Classification Name: Laser Surgical Instrument  
21 C.F.R § 878.4810

Legally Marketed Predicate Devices:  
Fraxel SR Laser System K050841  
Candela VBeam K033461  
Candela CBeam K033331  
Candela Smoothbeam K041242  
CoolTouch CT3 K043046  
Lumenis Ultrapulse Encore K022060

### Description of the Fraxel SR Laser System

The Fraxel SR Laser System consists of a set of fiber lasers, controlled by an embedded processor, to be used in dermatology. The laser system uses scanning and focusing optics to deliver a pattern of thermal energy to the epidermis and upper dermis. Device accessories include tip attachments.

### Indications for Use

The Reliant Laser System II is intended for use in:

Dermatological procedures requiring the coagulation of soft tissue;

Treatment of periorbital wrinkles;

Treatment of surgical scars and acne scars;

Photocoagulation of pigmented lesions, such as, but not limited to lentigos (age spots), solar lentigos (sun spots), melasma and dyschromia;

Skin resurfacing procedures.

**Compliance to 21 CFR 1040**

As a laser product, the Fraxel SR Laser System is required to conform and does conform to the requirements of 21 CFR 1040.

**Substantial Equivalence Comparison**

The technological characteristics and indications for use of the Fraxel SR Laser System are similar to those of the cited predicate laser devices. These devices are equivalent in terms of design, materials, principal of operation, and product specifications. Any differences between the Reliant Technologies Laser System II and the predicate devices do not raise new issues regarding safety or effectiveness.

**Clinical Performance Data**

Clinical performance data was used to demonstrate that the Fraxel SR Laser System functioned as clinically intended. The results from clinical investigation allowed for the determination that the Fraxel SR Laser System performs as clinically intended and that no new issues of safety and effectiveness are introduced.

**Conclusion**

Based on the design, materials, function, intended use, and clinical evaluation, the Fraxel SR Laser System is substantially equivalent to the devices currently marketed under the Federal Food, Drug and Cosmetic Act. In addition, the Fraxel SR Laser System raises no new safety or effectiveness issues. Therefore, safety and effectiveness are reasonably assured, justifying 510(k) clearance for commercial sale.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

MAR 20 2006

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Reliant Technologies, Inc.  
c/o Ms. Heather Tanner  
Clinical Research/Regulatory Affairs  
Manager  
464 Ellis Street  
Mountain View, California 94043

Re: K053047

Trade/Device Name: Reliant Laser System II and accessories (Fraxel SR Laser System)

Regulation Number: 21 CFR 878.4810

Regulation Name: Laser surgical instrument for use in general and plastic surgery and in dermatology

Regulatory Class: II

Product Code: GEX

Dated: February 16, 2006

Received: February 17, 2006

Dear Ms. Tanner:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

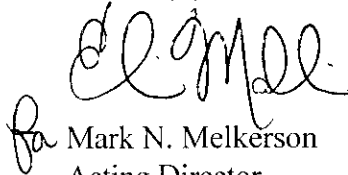
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must

comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "M. Melkerson", with a stylized initial "fa" to the left.

Mark N. Melkerson  
Acting Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K053047

Device Name: Reliant Laser System II and accessories (Fraxel SR Laser System)

Indications For Use:

"The Reliant Laser System II and accessories (Fraxel SR Laser System) is intended for use in:

Dermatological procedures requiring the coagulation of soft tissue;

Treatment of periorbital wrinkles;

Treatment of surgical scars and acne scars;

Photocoagulation of pigmented lesions, such as, but not limited to lentigos (age spots), solar lentigos (sun spots), melasma and dyschromia;

Skin resurfacing procedures."

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

  
\_\_\_\_\_  
(Division Sign-Off)

**Division of General, Restorative  
and Neurological Devices**

510(k) Number K053047